Information Sheet on CPPA FY2007 Priorities

Predictability and Prediction Studies: Scientific investigations are solicited to study the impact of ocean and land surface forcing and feedback processes on extreme events such as drought over North America on intra-seasonal to interannual time scales and to understand and predict North American hydroclimatic regimes; to develop research forecasts utilizing dynamic vegetation and/or high resolution downscaling capabilities; to perform process understanding, model evaluation and model improvement of the Western mountain hydroclimate and cold season processes. Analysis of existing data sets and outputs from model inter-comparisons are encouraged.

Understanding and Predicting of Monsoon Systems in Americas: CPPA seeks proposals to utilize the NAME 2004 field observations to document, diagnose, and simulate the spatial structure and diurnal cycle of the monsoon, to determine the sources and limits of predictability of warm season precipitation over Americas and to improve operational monitoring, analysis, and prediction of the American monsoon system on intraseasonal-to-interannual time scales. CPPA also invites investigations of the variability and predictability of the South American monsoon system, with emphasis on the ocean, land, and atmospheric processes responsible for the onset, demise and character of the continental scale monsoon and its variability. Studies on inter-hemisphere monsoon connections are also encouraged.

Understanding and Simulating Ocean-Atmosphere Processes in the Eastern Pacific: CPPA invites proposals to improve understanding and modeling of the ocean-atmosphere processes in the eastern tropical and south Pacific regions and to advance understanding and prediction of seasonal-to-interannual climate variability of those regions and the remote regions influenced by the variability. Investigators are encouraged to take advantage of previous and existing data sets, workshops, and other community activities, such as, EPIC, VOCALS, and Climate Process Team.

Improving Ensemble Hydrologic Prediction: The research areas include multi-model hydrology forecast framework; methodology for assimilating various data into hydrology forecasts; hydrologic uncertainty representation; and hydrologic forecast verification. Investigators are encouraged to collaborate with NWS River Forecast Centers and CPPA/GAPP Core Project at Office of Hydrology Development to improve operational hydrologic prediction.

CPPA Synthesis Projects: The synthesis team(s) will work with currently funded CPPA PIs to synthesize and transfer research findings to support NOAA Climate Prediction and Projection goals and products. The team(s) will produce synthesis products and report(s) based on existing funded projects, facilitate the transition of the research findings into model improvement and NWS operations and give recommendations for future research directions. The team(s) will play a coordinating role in CPPA working groups to bring PIs in the area(s) together. The team(s) should work with the GAPP Core Project, Climate Testbed, and/or Hydrology Testbed in research-to-operation transition. In FY07, CPPA seeks Synthesis Projects in areas of 1) air-sea interaction, 2) land-atmosphere interaction and 3) hydrologic forecasting and water resource applications.

For further information, investigators may contact the CPPA program managers Jin Huang (301-427-2371, Jin.Huang@noaa.gov), Kenneth Mooney (301-427-2381, Kenneth.Mooney@noaa.gov), or Annarita Mariotti (301-427-2390, Annarita.Mariotti@noaa.gov).